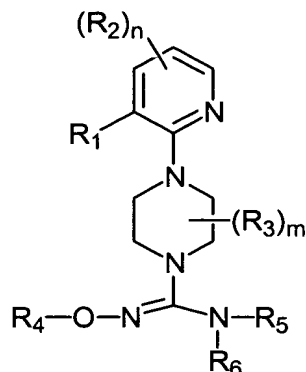


What is claimed is:

1. A compound of formula (I):



(I)

- 5 or a pharmaceutically acceptable salt thereof, wherein:

$R_1$  is -halo, -CH<sub>3</sub>, -NO<sub>2</sub>, -CN, -OH, -OCH<sub>3</sub>, -NH<sub>2</sub>, -C(halo)<sub>3</sub>, -CH(halo)<sub>2</sub>, or -CH<sub>2</sub>(halo);

each  $R_2$  is independently:

- (a) -halo, -CN, -OH, NO<sub>2</sub>, -O(C<sub>1</sub>-C<sub>6</sub>)alkyl, or -NH<sub>2</sub>;
- 10 (b) -(C<sub>1</sub>-C<sub>10</sub>)alkyl, -(C<sub>2</sub>-C<sub>10</sub>)alkenyl, -(C<sub>2</sub>-C<sub>10</sub>)alkynyl, -(C<sub>3</sub>-C<sub>10</sub>)cycloalkyl, -(C<sub>8</sub>-C<sub>14</sub>)bicycloalkyl, -(C<sub>8</sub>-C<sub>14</sub>)tricycloalkyl, -(C<sub>5</sub>-C<sub>10</sub>)cycloalkenyl, -(C<sub>8</sub>-C<sub>14</sub>)bicycloalkenyl, -(C<sub>8</sub>-C<sub>14</sub>)tricycloalkenyl, -(3- to 7-membered)heterocycle, or -(7- to 10-membered)bicycloheterocycle, each of which is unsubstituted or substituted with one or more  $R_7$  groups; or
- 15 (c) -phenyl, -naphthyl, -(C<sub>14</sub>)aryl or -(5- to 10-membered)heteroaryl, each of which is unsubstituted or substituted with one or more  $R_8$  groups;

each  $R_3$  is independently:

- (a) -halo, -CN, -OH, NO<sub>2</sub>, -O(C<sub>1</sub>-C<sub>6</sub>)alkyl, or -NH<sub>2</sub>;
- (b) -(C<sub>1</sub>-C<sub>10</sub>)alkyl, -(C<sub>2</sub>-C<sub>10</sub>)alkenyl, -(C<sub>2</sub>-C<sub>10</sub>)alkynyl, -(C<sub>3</sub>-C<sub>10</sub>)cycloalkyl,
- 20 -(C<sub>8</sub>-C<sub>14</sub>)bicycloalkyl, -(C<sub>8</sub>-C<sub>14</sub>)tricycloalkyl, -(C<sub>5</sub>-C<sub>10</sub>)cycloalkenyl, -(C<sub>8</sub>-C<sub>14</sub>)bicycloalkenyl, -(C<sub>8</sub>-C<sub>14</sub>)tricycloalkenyl, -(3- to 7-membered)heterocycle, or -(7- to 10-membered)bicycloheterocycle, each of which is unsubstituted or substituted with one or more  $R_7$  groups; or
- (c) -phenyl, -naphthyl, -(C<sub>14</sub>)aryl or -(5- to 10-membered)heteroaryl, each of
- 25 which is unsubstituted or substituted with one or more  $R_8$  groups;

$R_4$  is -H, -(C<sub>1</sub>-C<sub>10</sub>)alkyl, -C(O)R<sub>9</sub>, or -C(O)NHR<sub>9</sub>;

R<sub>5</sub> is -H or -(C<sub>1</sub>-C<sub>10</sub>)alkyl;

R<sub>6</sub> is:

(a) -(C<sub>1</sub>-C<sub>10</sub>)alkyl, -(C<sub>2</sub>-C<sub>10</sub>)alkenyl, -(C<sub>2</sub>-C<sub>10</sub>)alkynyl, -(C<sub>3</sub>-C<sub>10</sub>)cycloalkyl, -(C<sub>8</sub>-C<sub>14</sub>)bicycloalkyl, -(C<sub>8</sub>-C<sub>14</sub>)tricycloalkyl, -(C<sub>5</sub>-C<sub>10</sub>)cycloalkenyl, -(C<sub>8</sub>-C<sub>14</sub>)bicycloalkenyl, -(C<sub>8</sub>-C<sub>14</sub>)tricycloalkenyl, -(3- to 7-membered)heterocycle, or -(7- to 10-membered)bicycloheterocycle, each of which is unsubstituted or substituted with one or more R<sub>7</sub> groups; or

(b) -phenyl, -naphthyl, -(C<sub>14</sub>)aryl, or -(5- to 10-membered)heteroaryl, each of which is unsubstituted or substituted with one or more R<sub>8</sub> groups;

each R<sub>7</sub> and R<sub>8</sub> is independently -(C<sub>1</sub>-C<sub>6</sub>)alkyl, -(C<sub>2</sub>-C<sub>6</sub>)alkenyl, -(C<sub>2</sub>-C<sub>6</sub>)alkynyl, -(C<sub>3</sub>-C<sub>8</sub>)cycloalkyl, -(C<sub>5</sub>-C<sub>8</sub>)cycloalkenyl, -phenyl, -(3- to 5-membered)heterocycle, -C(halo)<sub>3</sub>, -CH(halo)<sub>2</sub>, -CH<sub>2</sub>(halo), -CN, -OH, -halo, -N<sub>3</sub>, -NO<sub>2</sub>, -N(R<sub>10</sub>)<sub>2</sub>, -CH=NR<sub>10</sub>, -NR<sub>10</sub>OH, -OR<sub>10</sub>, -COR<sub>10</sub>, -C(O)OR<sub>10</sub>, -OC(O)R<sub>10</sub>, -OC(O)OR<sub>10</sub>, -SR<sub>10</sub>, -S(O)R<sub>10</sub>, or -S(O)<sub>2</sub>R<sub>10</sub>;

each R<sub>9</sub> is -H, -(C<sub>1</sub>-C<sub>6</sub>)alkyl, -(C<sub>2</sub>-C<sub>6</sub>)alkenyl, -(C<sub>2</sub>-C<sub>6</sub>)alkynyl, -(C<sub>3</sub>-C<sub>8</sub>)cycloalkyl, -(C<sub>5</sub>-C<sub>8</sub>)cycloalkenyl, -phenyl, -(3- to 5-membered)heterocycle, -C(halo)<sub>3</sub>, -CH(halo)<sub>2</sub>, -CH<sub>2</sub>(halo), -OH, -N(R<sub>10</sub>)<sub>2</sub>, -CH=NR<sub>10</sub>, -NR<sub>10</sub>OH, -OR<sub>10</sub>, or -SR<sub>10</sub>;

each R<sub>10</sub> is independently -H, -(C<sub>1</sub>-C<sub>6</sub>)alkyl, -(C<sub>2</sub>-C<sub>6</sub>)alkenyl, -(C<sub>2</sub>-C<sub>6</sub>)alkynyl, -(C<sub>3</sub>-C<sub>8</sub>)cycloalkyl, -(C<sub>5</sub>-C<sub>8</sub>)cycloalkenyl, -phenyl, -(3- to 5-membered)heterocycle, -C(halo)<sub>3</sub>, -CH(halo)<sub>2</sub>, or -CH<sub>2</sub>(halo);

each halo is independently -F, -Cl, -Br, or -I;

n is an integer ranging from 0 to 2; and

m is an integer ranging from 0 to 2.

2. The compound of claim 1, wherein:

n is 0;

m is 0; and

R<sub>6</sub> is phenyl.

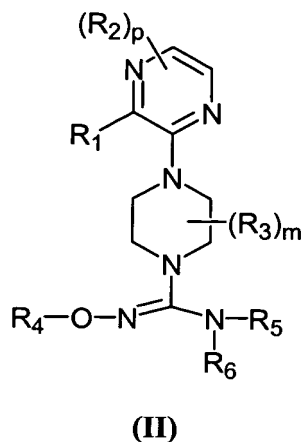
3. The compound of claim 2, wherein the R<sub>6</sub> phenyl is unsubstituted.

4. The compound of claim 2, wherein the R<sub>6</sub> phenyl is substituted at the para-position.

5. The compound of claim 4, wherein the R<sub>6</sub> phenyl is substituted with a -(C<sub>1</sub>-C<sub>6</sub>) alkyl group.

6. The compound of claim 5, wherein the  $-(C_1-C_6)$  alkyl group is a *tert*-butyl group.
7. The compound of claim 5, wherein the  $-(C_1-C_6)$  alkyl group is an *iso*-propyl group.
- 5 8. The compound of claim 4, wherein the phenyl is substituted with a  $-CF_3$  group.
9. The compound of claim 1, wherein:  
n is 0;  
m is 1;  
10  $R_3$  is methyl; and  
 $R_6$  is phenyl.
10. The compound of claim 9, wherein the  $R_6$  phenyl is unsubstituted.
11. The compound of claim 9, wherein the  $R_6$  phenyl is substituted at the para-position.
- 15 12. The compound of claim 11, wherein the  $R_6$  phenyl is substituted with a  $-(C_1-C_6)$  alkyl group.
13. The compound of claim 12, wherein the  $-(C_1-C_6)$  alkyl group is a *tert*-butyl group.
14. The compound of claim 12, wherein the  $-(C_1-C_6)$  alkyl group is an *iso*-propyl group.  
20
15. The compound of claim 11, wherein the  $R_6$  phenyl is substituted with a  $-CF_3$  group.
16. The compound of claim 1, wherein  $R_4$  is  $-H$ .
17. The compound of claim 1, wherein  $R_4$  is  $-(C_1-C_{10})$ alkyl.
- 25 18. The compound of claim 1, wherein  $R_4$  is  $-C(O)R_9$ .
19. The compound of claim 1, wherein  $R_4$  is  $-C(O)NHR_9$ .

20. A compound of formula (II):



or a pharmaceutically acceptable salt thereof, wherein:

5  $R_1$  is -halo, -CH<sub>3</sub>, -NO<sub>2</sub>, -CN, -OH, -OCH<sub>3</sub>, -NH<sub>2</sub>, -C(halo)<sub>3</sub>, -CH(halo)<sub>2</sub>, or -CH<sub>2</sub>(halo);

each  $R_2$  is independently:

(a) -halo, -CN, -OH, NO<sub>2</sub>, -O(C<sub>1</sub>-C<sub>6</sub>)alkyl, or -NH<sub>2</sub>;

10 (b) -(C<sub>1</sub>-C<sub>10</sub>)alkyl, -(C<sub>2</sub>-C<sub>10</sub>)alkenyl, -(C<sub>2</sub>-C<sub>10</sub>)alkynyl, -(C<sub>3</sub>-C<sub>10</sub>)cycloalkyl, -(C<sub>8</sub>-C<sub>14</sub>)bicycloalkyl, -(C<sub>8</sub>-C<sub>14</sub>)tricycloalkyl, -(C<sub>5</sub>-C<sub>10</sub>)cycloalkenyl, -(C<sub>8</sub>-C<sub>14</sub>)bicycloalkenyl, -(C<sub>8</sub>-C<sub>14</sub>)tricycloalkenyl, -(3- to 7-membered)heterocycle, or -(7- to 10-membered)bicycloheterocycle, each of which is unsubstituted or substituted with one or more  $R_7$  groups; or

15 (c) -phenyl, -naphthyl, -(C<sub>14</sub>)aryl or -(5- to 10-membered)heteroaryl, each of which is unsubstituted or substituted with one or more  $R_8$  groups;

each  $R_3$  is independently:

(a) -halo, -CN, -OH, NO<sub>2</sub>, -O(C<sub>1</sub>-C<sub>6</sub>)alkyl, or -NH<sub>2</sub>;

20 (b) -(C<sub>1</sub>-C<sub>10</sub>)alkyl, -(C<sub>2</sub>-C<sub>10</sub>)alkenyl, -(C<sub>2</sub>-C<sub>10</sub>)alkynyl, -(C<sub>3</sub>-C<sub>10</sub>)cycloalkyl, -(C<sub>8</sub>-C<sub>14</sub>)bicycloalkyl, -(C<sub>8</sub>-C<sub>14</sub>)tricycloalkyl, -(C<sub>5</sub>-C<sub>10</sub>)cycloalkenyl, -(C<sub>8</sub>-C<sub>14</sub>)bicycloalkenyl, -(C<sub>8</sub>-C<sub>14</sub>)tricycloalkenyl, -(3- to 7-membered)heterocycle, or -(7- to 10-membered)bicycloheterocycle, each of which is unsubstituted or substituted with one or more  $R_7$  groups; or

(c) -phenyl, -naphthyl, -(C<sub>14</sub>)aryl or -(5- to 10-membered)heteroaryl, each of which is unsubstituted or substituted with one or more  $R_8$  groups;

25  $R_4$  is -H, -(C<sub>1</sub>-C<sub>10</sub>)alkyl, -C(O) $R_9$ , or -C(O)NHR<sub>9</sub>;

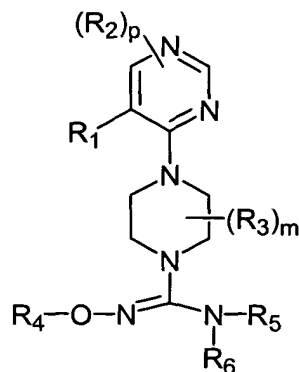
$R_5$  is -H or -(C<sub>1</sub>-C<sub>10</sub>)alkyl;

$R_6$  is:

- (a)  $-(C_1-C_{10})$ alkyl,  $-(C_2-C_{10})$ alkenyl,  $-(C_2-C_{10})$ alkynyl,  $-(C_3-C_{10})$ cycloalkyl,  $-(C_8-C_{14})$ bicycloalkyl,  $-(C_8-C_{14})$ tricycloalkyl,  $-(C_5-C_{10})$ cycloalkenyl,  $-(C_8-C_{14})$ bicycloalkenyl,  $-(C_8-C_{14})$ tricycloalkenyl,  $-(3- \text{ to } 7\text{-membered})$ heterocycle, or  $-(7- \text{ to } 10\text{-membered})$ bicycloheterocycle, each of which is unsubstituted or substituted with one or more  $R_7$  groups; or
- (b)  $-\text{phenyl}$ ,  $-\text{naphthyl}$ ,  $-(C_{14})$ aryl, or  $-(5- \text{ to } 10\text{-membered})$ heteroaryl, each of which is unsubstituted or substituted with one or more  $R_8$  groups;
- each  $R_7$  and  $R_8$  is independently  $-(C_1-C_6)$ alkyl,  $-(C_2-C_6)$ alkenyl,  $-(C_2-C_6)$ alkynyl,  $-(C_3-C_8)$ cycloalkyl,  $-(C_5-C_8)$ cycloalkenyl,  $-\text{phenyl}$ ,  $-(3- \text{ to } 5\text{-membered})$ heterocycle,  $-\text{C}(\text{halo})_3$ ,  $-\text{CH}(\text{halo})_2$ ,  $-\text{CH}_2(\text{halo})$ ,  $-\text{CN}$ ,  $-\text{OH}$ ,  $-\text{halo}$ ,  $-\text{N}_3$ ,  $-\text{NO}_2$ ,  $-\text{N}(\text{R}_{10})_2$ ,  $-\text{CH}=\text{NR}_{10}$ ,  $-\text{NR}_{10}\text{OH}$ ,  $-\text{OR}_{10}$ ,  $-\text{COR}_{10}$ ,  $-\text{C}(\text{O})\text{OR}_{10}$ ,  $-\text{OC}(\text{O})\text{R}_{10}$ ,  $-\text{OC}(\text{O})\text{OR}_{10}$ ,  $-\text{SR}_{10}$ ,  $-\text{S}(\text{O})\text{R}_{10}$ , or  $-\text{S}(\text{O})_2\text{R}_{10}$ ;
- each  $R_9$  is  $-\text{H}$ ,  $-(C_1-C_6)$ alkyl,  $-(C_2-C_6)$ alkenyl,  $-(C_2-C_6)$ alkynyl,  $-(C_3-C_8)$ cycloalkyl,  $-(C_5-C_8)$ cycloalkenyl,  $-\text{phenyl}$ ,  $-(3- \text{ to } 5\text{-membered})$ heterocycle,  $-\text{C}(\text{halo})_3$ ,  $-\text{CH}(\text{halo})_2$ ,  $-\text{CH}_2(\text{halo})$ ,  $-\text{OH}$ ,  $-\text{N}(\text{R}_{10})_2$ ,  $-\text{CH}=\text{NR}_{10}$ ,  $-\text{NR}_{10}\text{OH}$ ,  $-\text{OR}_{10}$ , or  $-\text{SR}_{10}$ ;
- each  $R_{10}$  is independently  $-\text{H}$ ,  $-(C_1-C_6)$ alkyl,  $-(C_2-C_6)$ alkenyl,  $-(C_2-C_6)$ alkynyl,  $-(C_3-C_8)$ cycloalkyl,  $-(C_5-C_8)$ cycloalkenyl,  $-\text{phenyl}$ ,  $-(3- \text{ to } 5\text{-membered})$ heterocycle,  $-\text{C}(\text{halo})_3$ ,  $-\text{CH}(\text{halo})_2$ , or  $-\text{CH}_2(\text{halo})$ ;
- each halo is independently  $-\text{F}$ ,  $-\text{Cl}$ ,  $-\text{Br}$ , or  $-\text{I}$ ;
- $p$  is an integer ranging from 0 to 2; and
- $m$  is an integer ranging from 0 to 2.
21. The compound of claim 20, wherein:
- $p$  is 0;
- $m$  is 0; and
- $R_6$  is phenyl.
22. The compound of claim 21, wherein the  $R_6$  phenyl is unsubstituted.
23. The compound of claim 21, wherein the  $R_6$  phenyl is substituted at the para-position.
24. The compound of claim 23, wherein the  $R_6$  phenyl is substituted with a  $-(C_1-C_6)$  alkyl group.

25. The compound of claim 24, wherein the  $-(C_1-C_6)$  alkyl group is a *tert*-butyl group.
26. The compound of claim 24, wherein the  $-(C_1-C_6)$  alkyl group is an *iso*-propyl group.
- 5 27. The compound of claim 23, wherein the  $R_6$  phenyl is substituted with a  $-CF_3$  group.
28. The compound of claim 20, wherein:  
p is 0;  
m is 1;  
10  $R_3$  is methyl; and  
 $R_6$  is phenyl.
29. The compound of claim 28, wherein the  $R_6$  phenyl is unsubstituted.
30. The compound of claim 28, wherein the  $R_6$  phenyl is substituted at the para-position.
- 15 31. The compound of claim 30, wherein the  $R_6$  phenyl is substituted with a  $-(C_1-C_6)$  alkyl group.
32. The compound of claim 31, wherein the  $-(C_1-C_6)$  alkyl group is a *tert*-butyl group.
33. The compound of claim 31, wherein the  $-(C_1-C_6)$  alkyl group is an *iso*-propyl group.  
20
34. The compound of claim 30, wherein the  $R_6$  phenyl is substituted with a  $-CF_3$  group.
35. The compound of claim 20, wherein  $R_4$  is  $-H$ .
36. The compound of claim 20, wherein  $R_4$  is  $-(C_1-C_{10})$ alkyl.
- 25 37. The compound of claim 20 wherein  $R_4$  is  $-C(O)R_9$ .
38. The compound of claim 20, wherein  $R_4$  is  $-C(O)NHR_9$ .

39. A compound of formula (III):



(III)

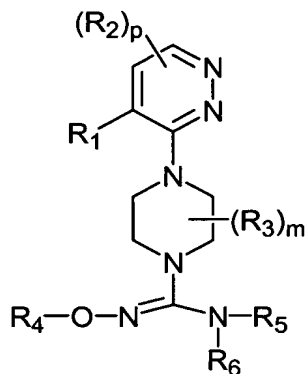
or a pharmaceutically acceptable salt thereof, wherein:

- 5             $R_1$  is -halo, -CH<sub>3</sub>, -NO<sub>2</sub>, -CN, -OH, -OCH<sub>3</sub>, -NH<sub>2</sub>, -C(halo)<sub>3</sub>, -CH(halo)<sub>2</sub>, or -CH<sub>2</sub>(halo);
- each  $R_2$  is independently:
- (a) -halo, -CN, -OH, NO<sub>2</sub>, -O(C<sub>1</sub>-C<sub>6</sub>)alkyl, or -NH<sub>2</sub>;
- (b) -(C<sub>1</sub>-C<sub>10</sub>)alkyl, -(C<sub>2</sub>-C<sub>10</sub>)alkenyl, -(C<sub>2</sub>-C<sub>10</sub>)alkynyl, -(C<sub>3</sub>-C<sub>10</sub>)cycloalkyl,
- 10        -(C<sub>8</sub>-C<sub>14</sub>)bicycloalkyl, -(C<sub>8</sub>-C<sub>14</sub>)tricycloalkyl, -(C<sub>5</sub>-C<sub>10</sub>)cycloalkenyl, -(C<sub>8</sub>-C<sub>14</sub>)bicycloalkenyl, -(C<sub>8</sub>-C<sub>14</sub>)tricycloalkenyl, -(3- to 7-membered)heterocycle, or -(7- to 10-membered)bicycloheterocycle, each of which is unsubstituted or substituted with one or more  $R_7$  groups; or
- (c) -phenyl, -naphthyl, -(C<sub>14</sub>)aryl or -(5- to 10-membered)heteroaryl, each of
- 15        which is unsubstituted or substituted with one or more  $R_8$  groups;
- each  $R_3$  is independently:
- (a) -halo, -CN, -OH, NO<sub>2</sub>, -O(C<sub>1</sub>-C<sub>6</sub>)alkyl, or -NH<sub>2</sub>;
- (b) -(C<sub>1</sub>-C<sub>10</sub>)alkyl, -(C<sub>2</sub>-C<sub>10</sub>)alkenyl, -(C<sub>2</sub>-C<sub>10</sub>)alkynyl, -(C<sub>3</sub>-C<sub>10</sub>)cycloalkyl,
- 20        -(C<sub>8</sub>-C<sub>14</sub>)bicycloalkyl, -(C<sub>8</sub>-C<sub>14</sub>)tricycloalkyl, -(C<sub>5</sub>-C<sub>10</sub>)cycloalkenyl, -(C<sub>8</sub>-C<sub>14</sub>)bicycloalkenyl, -(C<sub>8</sub>-C<sub>14</sub>)tricycloalkenyl, -(3- to 7-membered)heterocycle, or -(7- to 10-membered)bicycloheterocycle, each of which is unsubstituted or substituted with one or more  $R_7$  groups; or
- (c) -phenyl, -naphthyl, -(C<sub>14</sub>)aryl or -(5- to 10-membered)heteroaryl, each of
- which is unsubstituted or substituted with one or more  $R_8$  groups;
- 25             $R_4$  is -H, -(C<sub>1</sub>-C<sub>10</sub>)alkyl, -C(O)R<sub>9</sub>, or -C(O)NHR<sub>9</sub>;
- $R_5$  is -H or -(C<sub>1</sub>-C<sub>10</sub>)alkyl;
- $R_6$  is:

- (a)  $-(C_1-C_{10})$ alkyl,  $-(C_2-C_{10})$ alkenyl,  $-(C_2-C_{10})$ alkynyl,  $-(C_3-C_{10})$ cycloalkyl,  $-(C_8-C_{14})$ bicycloalkyl,  $-(C_8-C_{14})$ tricycloalkyl,  $-(C_5-C_{10})$ cycloalkenyl,  $-(C_8-C_{14})$ bicycloalkenyl,  $-(C_8-C_{14})$ tricycloalkenyl,  $-(3- \text{ to } 7\text{-membered})$ heterocycle, or  $-(7- \text{ to } 10\text{-membered})$ bicycloheterocycle, each of which is unsubstituted or substituted with one or  
5 more  $R_7$  groups; or
- (b)  $-\text{phenyl}$ ,  $-\text{naphthyl}$ ,  $-(C_{14})\text{aryl}$ , or  $-(5- \text{ to } 10\text{-membered})$ heteroaryl, each of which is unsubstituted or substituted with one or more  $R_8$  groups;
- each  $R_7$  and  $R_8$  is independently  $-(C_1-C_6)$ alkyl,  $-(C_2-C_6)$ alkenyl,  $-(C_2-C_6)$ alkynyl,  $-(C_3-C_8)$ cycloalkyl,  $-(C_5-C_8)$ cycloalkenyl,  $-\text{phenyl}$ ,  $-(3- \text{ to } 5\text{-membered})$ heterocycle,  
10  $-\text{C}(\text{halo})_3$ ,  $-\text{CH}(\text{halo})_2$ ,  $-\text{CH}_2(\text{halo})$ ,  $-\text{CN}$ ,  $-\text{OH}$ ,  $-\text{halo}$ ,  $-\text{N}_3$ ,  $-\text{NO}_2$ ,  $-\text{N}(\text{R}_{10})_2$ ,  $-\text{CH}=\text{NR}_{10}$ ,  $-\text{NR}_{10}\text{OH}$ ,  $-\text{OR}_{10}$ ,  $-\text{COR}_{10}$ ,  $-\text{C}(\text{O})\text{OR}_{10}$ ,  $-\text{OC}(\text{O})\text{R}_{10}$ ,  $-\text{OC}(\text{O})\text{OR}_{10}$ ,  $-\text{SR}_{10}$ ,  $-\text{S}(\text{O})\text{R}_{10}$ , or  $-\text{S}(\text{O})_2\text{R}_{10}$ ;
- each  $R_9$  is  $-\text{H}$ ,  $-(C_1-C_6)$ alkyl,  $-(C_2-C_6)$ alkenyl,  $-(C_2-C_6)$ alkynyl,  $-(C_3-C_8)$ cycloalkyl,  $-(C_5-C_8)$ cycloalkenyl,  $-\text{phenyl}$ ,  $-(3- \text{ to } 5\text{-membered})$ heterocycle,  $-\text{C}(\text{halo})_3$ ,  $-\text{CH}(\text{halo})_2$ ,  $-\text{CH}_2(\text{halo})$ ,  $-\text{OH}$ ,  $-\text{N}(\text{R}_{10})_2$ ,  $-\text{CH}=\text{NR}_{10}$ ,  $-\text{NR}_{10}\text{OH}$ ,  $-\text{OR}_{10}$ , or  $-\text{SR}_{10}$ ;  
15
- each  $R_{10}$  is independently  $-\text{H}$ ,  $-(C_1-C_6)$ alkyl,  $-(C_2-C_6)$ alkenyl,  $-(C_2-C_6)$ alkynyl,  $-(C_3-C_8)$ cycloalkyl,  $-(C_5-C_8)$ cycloalkenyl,  $-\text{phenyl}$ ,  $-(3- \text{ to } 5\text{-membered})$ heterocycle,  $-\text{C}(\text{halo})_3$ ,  $-\text{CH}(\text{halo})_2$ , or  $-\text{CH}_2(\text{halo})$ ;
- each halo is independently  $-\text{F}$ ,  $-\text{Cl}$ ,  $-\text{Br}$ , or  $-\text{I}$ ;
- 20  $p$  is an integer ranging from 0 to 2; and  
 $m$  is an integer ranging from 0 to 2.
40. The compound of claim 39, wherein:
- $p$  is 0;  
 $m$  is 0; and  
25  $R_6$  is phenyl.
41. The compound of claim 40, wherein the  $R_6$  phenyl is unsubstituted.
42. The compound of claim 40, wherein the  $R_6$  phenyl is substituted at the para-position.
43. The compound of claim 42, wherein the  $R_6$  phenyl is substituted with a  $-(C_1-C_6)$  alkyl group.  
30
44. The compound of claim 43, wherein the  $-(C_1-C_6)$  alkyl group is a *tert*-butyl group.



45. The compound of claim 43, wherein the  $-(C_1-C_6)$  alkyl group is an *iso*-propyl group.
46. The compound of claim 42, wherein the  $R_6$  phenyl is substituted with a  $-CF_3$  group.
- 5 47. The compound of claim 39, wherein:  
p is 0;  
m is 1;  
 $R_3$  is methyl; and  
 $R_6$  is phenyl.
- 10 48. The compound of claim 47, wherein the  $R_6$  phenyl is unsubstituted.
49. The compound of claim 47, wherein the  $R_6$  phenyl is substituted at the para-position.
50. The compound of claim 49, wherein the  $R_6$  phenyl is substituted with a  $-(C_1-C_6)$  alkyl group.
- 15 51. The compound of claim 50, wherein the  $-(C_1-C_6)$  alkyl group is a *tert*-butyl group.
52. The compound of claim 50, wherein the  $-(C_1-C_6)$  alkyl group is an *iso*-propyl group.
53. The compound of claim 49, wherein the  $R_6$  phenyl is substituted with a  $-CF_3$  group.
- 20 group.
54. The compound of claim 39, wherein  $R_4$  is  $-H$ .
55. The compound of claim 39, wherein  $R_4$  is  $-(C_1-C_{10})$ alkyl.
56. The compound of claim 39, wherein  $R_4$  is  $-C(O)R_9$ .
57. The compound of claim 39, wherein  $R_4$  is  $-C(O)NHR_9$ .
- 25 58. A compound of formula (IV):



(IV)

or a pharmaceutically acceptable salt thereof, wherein:

R<sub>1</sub> is -halo, -CH<sub>3</sub>, -NO<sub>2</sub>, -CN, -OH, -OCH<sub>3</sub>, -NH<sub>2</sub>, -C(halo)<sub>3</sub>, -CH(halo)<sub>2</sub>, or  
 5 -CH<sub>2</sub>(halo);

each R<sub>2</sub> is independently:

(a) -halo, -CN, -OH, NO<sub>2</sub>, -O(C<sub>1</sub>-C<sub>6</sub>)alkyl, or -NH<sub>2</sub>;

(b) -(C<sub>1</sub>-C<sub>10</sub>)alkyl, -(C<sub>2</sub>-C<sub>10</sub>)alkenyl, -(C<sub>2</sub>-C<sub>10</sub>)alkynyl, -(C<sub>3</sub>-C<sub>10</sub>)cycloalkyl,  
 10 -(C<sub>8</sub>-C<sub>14</sub>)bicycloalkyl, -(C<sub>8</sub>-C<sub>14</sub>)tricycloalkyl, -(C<sub>5</sub>-C<sub>10</sub>)cycloalkenyl, -(C<sub>8</sub>-  
 C<sub>14</sub>)bicycloalkenyl, -(C<sub>8</sub>-C<sub>14</sub>)tricycloalkenyl, -(3- to 7-membered)heterocycle, or -(7- to 10-  
 membered)bicycloheterocycle, each of which is unsubstituted or substituted with one or  
 more R<sub>7</sub> groups; or

(c) -phenyl, -naphthyl, -(C<sub>14</sub>)aryl or -(5- to 10-membered)heteroaryl, each of  
 which is unsubstituted or substituted with one or more R<sub>8</sub> groups;

15 each R<sub>3</sub> is independently:

(a) -halo, -CN, -OH, NO<sub>2</sub>, -O(C<sub>1</sub>-C<sub>6</sub>)alkyl, or -NH<sub>2</sub>;

(b) -(C<sub>1</sub>-C<sub>10</sub>)alkyl, -(C<sub>2</sub>-C<sub>10</sub>)alkenyl, -(C<sub>2</sub>-C<sub>10</sub>)alkynyl, -(C<sub>3</sub>-C<sub>10</sub>)cycloalkyl,  
 -(C<sub>8</sub>-C<sub>14</sub>)bicycloalkyl, -(C<sub>8</sub>-C<sub>14</sub>)tricycloalkyl, -(C<sub>5</sub>-C<sub>10</sub>)cycloalkenyl, -(C<sub>8</sub>-  
 C<sub>14</sub>)bicycloalkenyl, -(C<sub>8</sub>-C<sub>14</sub>)tricycloalkenyl, -(3- to 7-membered)heterocycle, or -(7- to 10-  
 20 membered)bicycloheterocycle, each of which is unsubstituted or substituted with one or  
 more R<sub>7</sub> groups; or

(c) -phenyl, -naphthyl, -(C<sub>14</sub>)aryl or -(5- to 10-membered)heteroaryl, each of  
 which is unsubstituted or substituted with one or more R<sub>8</sub> groups;

R<sub>4</sub> is -H, -(C<sub>1</sub>-C<sub>10</sub>)alkyl, -C(O)R<sub>9</sub>, or -C(O)NHR<sub>9</sub>;

25 R<sub>5</sub> is -H or -(C<sub>1</sub>-C<sub>10</sub>)alkyl;

R<sub>6</sub> is:

- (a)  $-(C_1-C_{10})$ alkyl,  $-(C_2-C_{10})$ alkenyl,  $-(C_2-C_{10})$ alkynyl,  $-(C_3-C_{10})$ cycloalkyl,  $-(C_8-C_{14})$ bicycloalkyl,  $-(C_8-C_{14})$ tricycloalkyl,  $-(C_5-C_{10})$ cycloalkenyl,  $-(C_8-C_{14})$ bicycloalkenyl,  $-(C_8-C_{14})$ tricycloalkenyl, (3- to 7-membered)heterocycle, or (7- to 10-membered)bicycloheterocycle, each of which is unsubstituted or substituted with one or more  $R_7$  groups; or
- (b) -phenyl, -naphthyl,  $-(C_{14})$ aryl, or (5- to 10-membered)heteroaryl, each of which is unsubstituted or substituted with one or more  $R_8$  groups;
- each  $R_7$  and  $R_8$  is independently  $-(C_1-C_6)$ alkyl,  $-(C_2-C_6)$ alkenyl,  $-(C_2-C_6)$ alkynyl,  $-(C_3-C_8)$ cycloalkyl,  $-(C_5-C_8)$ cycloalkenyl, -phenyl, (3- to 5-membered)heterocycle,  $-C(halo)_3$ ,  $-CH(halo)_2$ ,  $-CH_2(halo)$ , -CN, -OH, -halo,  $-N_3$ ,  $-NO_2$ ,  $-N(R_{10})_2$ ,  $-CH=NR_{10}$ ,  $-NR_{10}OH$ ,  $-OR_{10}$ ,  $-COR_{10}$ ,  $-C(O)OR_{10}$ ,  $-OC(O)R_{10}$ ,  $-OC(O)OR_{10}$ ,  $-SR_{10}$ ,  $-S(O)R_{10}$ , or  $-S(O)_2R_{10}$ ;
- each  $R_9$  is -H,  $-(C_1-C_6)$ alkyl,  $-(C_2-C_6)$ alkenyl,  $-(C_2-C_6)$ alkynyl,  $-(C_3-C_8)$ cycloalkyl,  $-(C_5-C_8)$ cycloalkenyl, -phenyl, (3- to 5-membered)heterocycle,  $-C(halo)_3$ ,  $-CH(halo)_2$ ,  $-CH_2(halo)$ , -OH,  $-N(R_{10})_2$ ,  $-CH=NR_{10}$ ,  $-NR_{10}OH$ ,  $-OR_{10}$ , or  $-SR_{10}$ ;
- each  $R_{10}$  is independently -H,  $-(C_1-C_6)$ alkyl,  $-(C_2-C_6)$ alkenyl,  $-(C_2-C_6)$ alkynyl,  $-(C_3-C_8)$ cycloalkyl,  $-(C_5-C_8)$ cycloalkenyl, -phenyl, (3- to 5-membered)heterocycle,  $-C(halo)_3$ ,  $-CH(halo)_2$ , or  $-CH_2(halo)$ ;
- each halo is independently -F, -Cl, -Br, or -I;
- p is an integer ranging from 0 to 2; and
- m is an integer ranging from 0 to 2.

59. The compound of claim 58, wherein:

- p is 0;
- m is 0; and
- $R_6$  is phenyl.

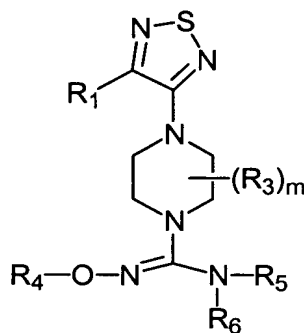
60. The compound of claim 59, wherein the  $R_6$  phenyl is unsubstituted.

61. The compound of claim 59, wherein the  $R_6$  phenyl is substituted at the para-position.

62. The compound of claim 61, wherein the  $R_6$  phenyl is substituted with a  $-(C_1-C_6)$  alkyl group.

63. The compound of claim 62, wherein the  $-(C_1-C_6)$  alkyl group is a *tert*-butyl group.
64. The compound of claim 62, wherein the  $-(C_1-C_6)$  alkyl group is an *iso*-propyl group.
- 5 65. The compound of claim 61, wherein the  $R_6$  phenyl is substituted with a  $-CF_3$  group.
66. The compound of claim 58, wherein:  
p is 0;  
m is 1;  
10  $R_3$  is methyl; and  
 $R_6$  is phenyl.
67. The compound of claim 66, wherein the  $R_6$  phenyl is unsubstituted.
68. The compound of claim 66, wherein the  $R_6$  phenyl is substituted at the para-position.
- 15 69. The compound of claim 68, wherein the  $R_6$  phenyl is substituted with a  $-(C_1-C_6)$  alkyl group.
70. The compound of claim 69, wherein the  $-(C_1-C_6)$  alkyl group is a *tert*-butyl group.
71. The compound of claim 69, wherein the  $-(C_1-C_6)$  alkyl group is an *iso*-propyl group.  
20
72. The compound of claim 68, wherein the  $R_6$  phenyl is substituted with a  $-CF_3$  group.
73. The compound of claim 58, wherein  $R_4$  is  $-H$ .
74. The compound of claim 58, wherein  $R_4$  is  $-(C_1-C_{10})$ alkyl.
- 25 75. The compound of claim 58, wherein  $R_4$  is  $-C(O)R_9$ .
76. The compound of claim 58, wherein  $R_4$  is  $-C(O)NHR_9$ .

77. A compound of formula (V):



(V)

or a pharmaceutically acceptable salt thereof, wherein:

5  $R_1$  is -halo, -CH<sub>3</sub>, -NO<sub>2</sub>, -CN, -OH, -OCH<sub>3</sub>, -NH<sub>2</sub>, -C(halo)<sub>3</sub>, -CH(halo)<sub>2</sub>, or -CH<sub>2</sub>(halo);

each  $R_3$  is independently:

(a) -halo, -CN, -OH, NO<sub>2</sub>, or -NH<sub>2</sub>;

(b) -(C<sub>1</sub>-C<sub>10</sub>)alkyl, -(C<sub>2</sub>-C<sub>10</sub>)alkenyl, -(C<sub>2</sub>-C<sub>10</sub>)alkynyl, -(C<sub>3</sub>-C<sub>10</sub>)cycloalkyl,  
 10 -(C<sub>8</sub>-C<sub>14</sub>)bicycloalkyl, -(C<sub>8</sub>-C<sub>14</sub>)tricycloalkyl, -(C<sub>5</sub>-C<sub>10</sub>)cycloalkenyl, -(C<sub>8</sub>-C<sub>14</sub>)bicycloalkenyl, -(C<sub>8</sub>-C<sub>14</sub>)tricycloalkenyl, -(3- to 7-membered)heterocycle, or -(7- to 10-membered)bicycloheterocycle, each of which is unsubstituted or substituted with one or more  $R_7$  groups; or

(c) -phenyl, -naphthyl, -(C<sub>14</sub>)aryl or -(5- to 10-membered)heteroaryl, each of  
 15 which is unsubstituted or substituted with one or more  $R_8$  groups;

$R_4$  is -H, -(C<sub>1</sub>-C<sub>10</sub>)alkyl, -C(O) $R_9$ , or -C(O)NHR<sub>9</sub>;

$R_5$  is -H or -(C<sub>1</sub>-C<sub>10</sub>)alkyl;

$R_6$  is:

(a) -(C<sub>1</sub>-C<sub>10</sub>)alkyl, -(C<sub>2</sub>-C<sub>10</sub>)alkenyl, -(C<sub>2</sub>-C<sub>10</sub>)alkynyl, -(C<sub>3</sub>-C<sub>10</sub>)cycloalkyl, -(C<sub>8</sub>-C<sub>14</sub>)bicycloalkyl, -(C<sub>8</sub>-C<sub>14</sub>)tricycloalkyl, -(C<sub>5</sub>-C<sub>10</sub>)cycloalkenyl, -(C<sub>8</sub>-C<sub>14</sub>)bicycloalkenyl, -(C<sub>8</sub>-C<sub>14</sub>)tricycloalkenyl, -(3- to 7-membered)heterocycle, or -(7- to 10-membered)bicycloheterocycle, each of which is unsubstituted or substituted with one or more  $R_7$  groups; or

(b) -phenyl, -naphthyl, -(C<sub>14</sub>)aryl, or -(5- to 10-membered)heteroaryl,  
 25 each of which is unsubstituted or substituted with one or more  $R_8$  groups;

each  $R_7$  and  $R_8$  is independently -(C<sub>1</sub>-C<sub>6</sub>)alkyl, -(C<sub>2</sub>-C<sub>6</sub>)alkenyl, -(C<sub>2</sub>-C<sub>6</sub>)alkynyl, -(C<sub>3</sub>-C<sub>8</sub>)cycloalkyl, -(C<sub>5</sub>-C<sub>8</sub>)cycloalkenyl, -phenyl, -(3- to 5-membered)heterocycle,

- C(halo)<sub>3</sub>, -CH(halo)<sub>2</sub>, -CH<sub>2</sub>(halo), -CN, -OH, -halo, -N<sub>3</sub>, -NO<sub>2</sub>, -N(R<sub>10</sub>)<sub>2</sub>, -CH=NR<sub>10</sub>, -NR<sub>10</sub>OH, -OR<sub>10</sub>, -COR<sub>10</sub>, -C(O)OR<sub>10</sub>, -OC(O)R<sub>10</sub>, -OC(O)OR<sub>10</sub>, -SR<sub>10</sub>, -S(O)R<sub>10</sub>, or -S(O)<sub>2</sub>R<sub>10</sub>;
- each R<sub>9</sub> is -H, -(C<sub>1</sub>-C<sub>6</sub>)alkyl, -(C<sub>2</sub>-C<sub>6</sub>)alkenyl, -(C<sub>2</sub>-C<sub>6</sub>)alkynyl, -(C<sub>3</sub>-C<sub>8</sub>)cycloalkyl, -(C<sub>5</sub>-C<sub>8</sub>)cycloalkenyl, -phenyl, -(3- to 5-membered)heterocycle, -C(halo)<sub>3</sub>, -CH(halo)<sub>2</sub>, -CH<sub>2</sub>(halo), -OH, -N(R<sub>10</sub>)<sub>2</sub>, -CH=NR<sub>10</sub>, -NR<sub>10</sub>OH, -OR<sub>10</sub>, or -SR<sub>10</sub>;
- each R<sub>10</sub> is independently -H, -(C<sub>1</sub>-C<sub>6</sub>)alkyl, -(C<sub>2</sub>-C<sub>6</sub>)alkenyl, -(C<sub>2</sub>-C<sub>6</sub>)alkynyl, -(C<sub>3</sub>-C<sub>8</sub>)cycloalkyl, -(C<sub>5</sub>-C<sub>8</sub>)cycloalkenyl, -phenyl, -(3- to 5-membered)heterocycle, -C(halo)<sub>3</sub>, -CH(halo)<sub>2</sub>, or -CH<sub>2</sub>(halo);
- each halo is independently -F, -Cl, -Br, or -I; and
- m is an integer ranging from 0 to 2.
78. The compound of claim 77, wherein:
- m is 0; and
- R<sub>6</sub> is phenyl.
79. The compound of claim 78, wherein the R<sub>6</sub> phenyl is unsubstituted.
80. The compound of claim 78, wherein the R<sub>6</sub> phenyl is substituted at the para-position.
81. The compound of claim 80, wherein the R<sub>6</sub> phenyl is substituted with a -(C<sub>1</sub>-C<sub>6</sub>) alkyl group.
82. The compound of claim 81, wherein the -(C<sub>1</sub>-C<sub>6</sub>) alkyl group is a *tert*-butyl group.
83. The compound of claim 81, wherein the -(C<sub>1</sub>-C<sub>6</sub>) alkyl group is an *iso*-propyl group.
84. The compound of claim 80, wherein the R<sub>6</sub> phenyl is substituted with a -CF<sub>3</sub> group.
85. The compound of claim 77, wherein:
- m is 1;
- R<sub>3</sub> is methyl; and
- R<sub>6</sub> is phenyl.

86. The compound of claim 85, wherein the R<sub>6</sub> phenyl is unsubstituted.
87. The compound of claim 85, wherein the R<sub>6</sub> phenyl is substituted at the para-position.
- 5 88. The compound of claim 87, wherein the R<sub>6</sub> phenyl is substituted with a -(C<sub>1</sub>-C<sub>6</sub>) alkyl group.
89. The compound of claim 88, wherein the -(C<sub>1</sub>-C<sub>6</sub>) alkyl group is a *tert*-butyl group.
90. The compound of claim 88, wherein the -(C<sub>1</sub>-C<sub>6</sub>) alkyl group is an *iso*-propyl group.
- 10 91. The compound of claim 87, wherein the R<sub>6</sub> phenyl is substituted with a -CF<sub>3</sub> group.
92. The compound of claim 77, wherein R<sub>4</sub> is -H.
93. The compound of claim 77, wherein R<sub>4</sub> is -(C<sub>1</sub>-C<sub>10</sub>)alkyl.
94. The compound of claim 77, wherein R<sub>4</sub> is -C(O)R<sub>9</sub>.
- 15 95. The compound of claim 77, wherein R<sub>4</sub> is -C(O)NHR<sub>9</sub>.
96. A composition comprising an effective amount of the compound or a pharmaceutically acceptable salt of the compound of claim 1 and a pharmaceutically acceptable carrier or excipient.
- 20 97. A composition comprising an effective amount of the compound or a pharmaceutically acceptable salt of the compound of claim 20 and a pharmaceutically acceptable carrier or excipient.
98. A composition comprising an effective amount of the compound or a pharmaceutically acceptable salt of the compound of claim 39 and a pharmaceutically acceptable carrier or excipient.
- 25 99. A composition comprising an effective amount of the compound or a pharmaceutically acceptable salt of the compound of claim 58 and a pharmaceutically acceptable carrier or excipient.

100. A composition comprising an effective amount of the compound or a pharmaceutically acceptable salt of the compound of claim 77 and a pharmaceutically acceptable carrier or excipient.

5 101. A method for treating pain, comprising administering to an animal in need thereof an effective amount of the compound or a pharmaceutically acceptable salt of the compound of claim 1.

102. A method for treating pain, comprising administering to an animal in need thereof an effective amount of the compound or a pharmaceutically acceptable salt of the compound of claim 20.

10 103. A method for treating pain, comprising administering to an animal in need thereof an effective amount of the compound or a pharmaceutically acceptable salt of the compound of claim 39.

15 104. A method for treating pain, comprising administering to an animal in need thereof an effective amount of the compound or a pharmaceutically acceptable salt of the compound of claim 58.

105. A method for treating pain, comprising administering to an animal in need thereof an effective amount of the compound or a pharmaceutically acceptable salt of the compound of claim 77.

20 106. A method for inhibiting VR1 function in a cell, comprising contacting a cell capable of expressing VR1 with an effective amount of the compound or a pharmaceutically acceptable salt of the compound of claim 1.

107. A method for inhibiting VR1 function in a cell, comprising contacting a cell capable of expressing VR1 with an effective amount of the compound or a pharmaceutically acceptable salt of the compound of claim 20.

25 108. A method for inhibiting VR1 function in a cell, comprising contacting a cell capable of expressing VR1 with an effective amount of the compound or a pharmaceutically acceptable salt of the compound of claim 39.



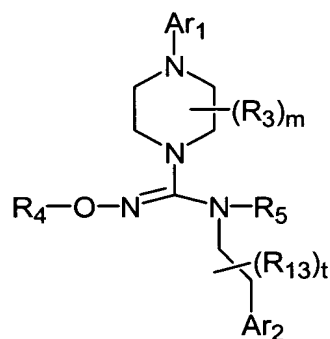
109. A method for inhibiting VR1 function in a cell, comprising contacting a cell capable of expressing VR1 with an effective amount of the compound or a pharmaceutically acceptable salt of the compound of claim 58.
110. A method for inhibiting VR1 function in a cell, comprising contacting a cell  
5 capable of expressing VR1 with an effective amount of the compound or a pharmaceutically acceptable salt of the compound of claim 77.
111. The compound of claim 1, wherein m is 1 and R<sub>3</sub> is attached to a carbon atom adjacent to the nitrogen atom attached to the -C(=N-OR<sub>4</sub>)-NR<sub>5</sub>R<sub>6</sub> group.
112. The compound of claim 111, wherein the carbon atom to which R<sub>3</sub> is  
10 attached is in the (R) configuration.
113. The compound of claim 112, wherein R<sub>3</sub> is -CH<sub>3</sub>, -CF<sub>3</sub>, or -CH<sub>2</sub>CH<sub>3</sub>.
114. The compound of claim 20, wherein m is 1 and R<sub>3</sub> is attached to a carbon atom adjacent to the nitrogen atom attached to the -C(=N-OR<sub>4</sub>)-NR<sub>5</sub>R<sub>6</sub> group.
115. The compound of claim 114, wherein the carbon atom to which R<sub>3</sub> is  
15 attached is in the (R) configuration.
116. The compound of claim 115, wherein R<sub>3</sub> is -CH<sub>3</sub>, -CF<sub>3</sub>, or -CH<sub>2</sub>CH<sub>3</sub>.
117. The compound of claim 39, wherein m is 1 and R<sub>3</sub> is attached to a carbon atom adjacent to the nitrogen atom attached to the -C(=N-OR<sub>4</sub>)-NR<sub>5</sub>R<sub>6</sub> group.
118. The compound of claim 117, wherein the carbon atom to which R<sub>3</sub> is  
20 attached is in the (R) configuration.
119. The compound of claim 118, wherein R<sub>3</sub> is -CH<sub>3</sub>, -CF<sub>3</sub>, or -CH<sub>2</sub>CH<sub>3</sub>.
120. The compound of claim 58, wherein m is 1 and R<sub>3</sub> is attached to a carbon atom adjacent to the nitrogen atom attached to the -C(=N-OR<sub>4</sub>)-NR<sub>5</sub>R<sub>6</sub> group.
121. The compound of claim 120, wherein the carbon atom to which R<sub>3</sub> is  
25 attached is in the (R) configuration.
122. The compound of claim 121, wherein R<sub>3</sub> is -CH<sub>3</sub>, -CF<sub>3</sub>, or -CH<sub>2</sub>CH<sub>3</sub>.

123. The compound of claim 77, wherein m is 1 and R<sub>3</sub> is attached to a carbon atom adjacent to the nitrogen atom attached to the -C(=N-OR<sub>4</sub>)-NR<sub>5</sub>R<sub>6</sub> group.

124. The compound of claim 123, wherein the carbon atom to which R<sub>3</sub> is attached is in the (R) configuration.

5 125. The compound of claim 124, wherein R<sub>3</sub> is -CH<sub>3</sub>, -CF<sub>3</sub>, or -CH<sub>2</sub>CH<sub>3</sub>.

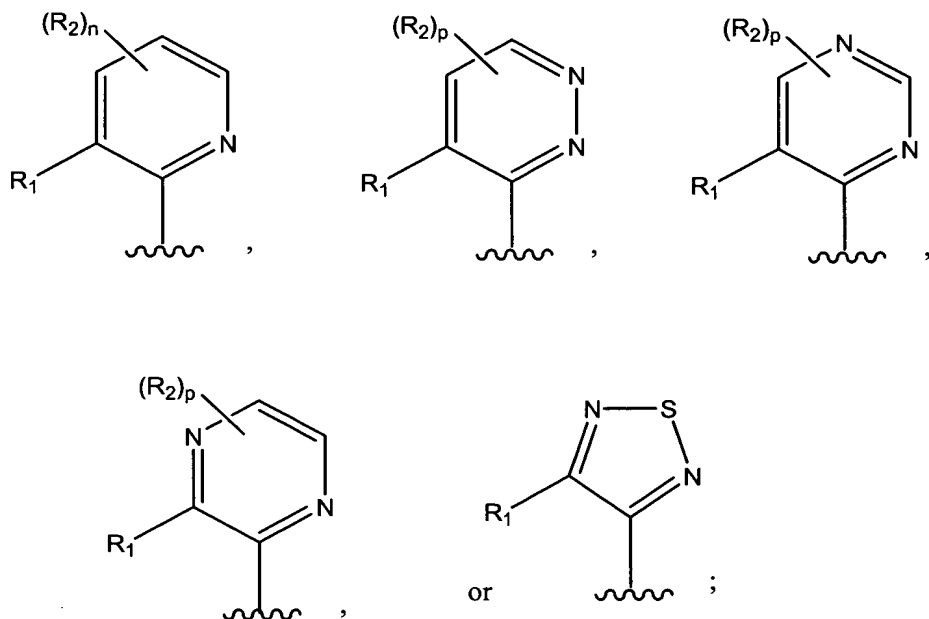
126. A compound of formula:



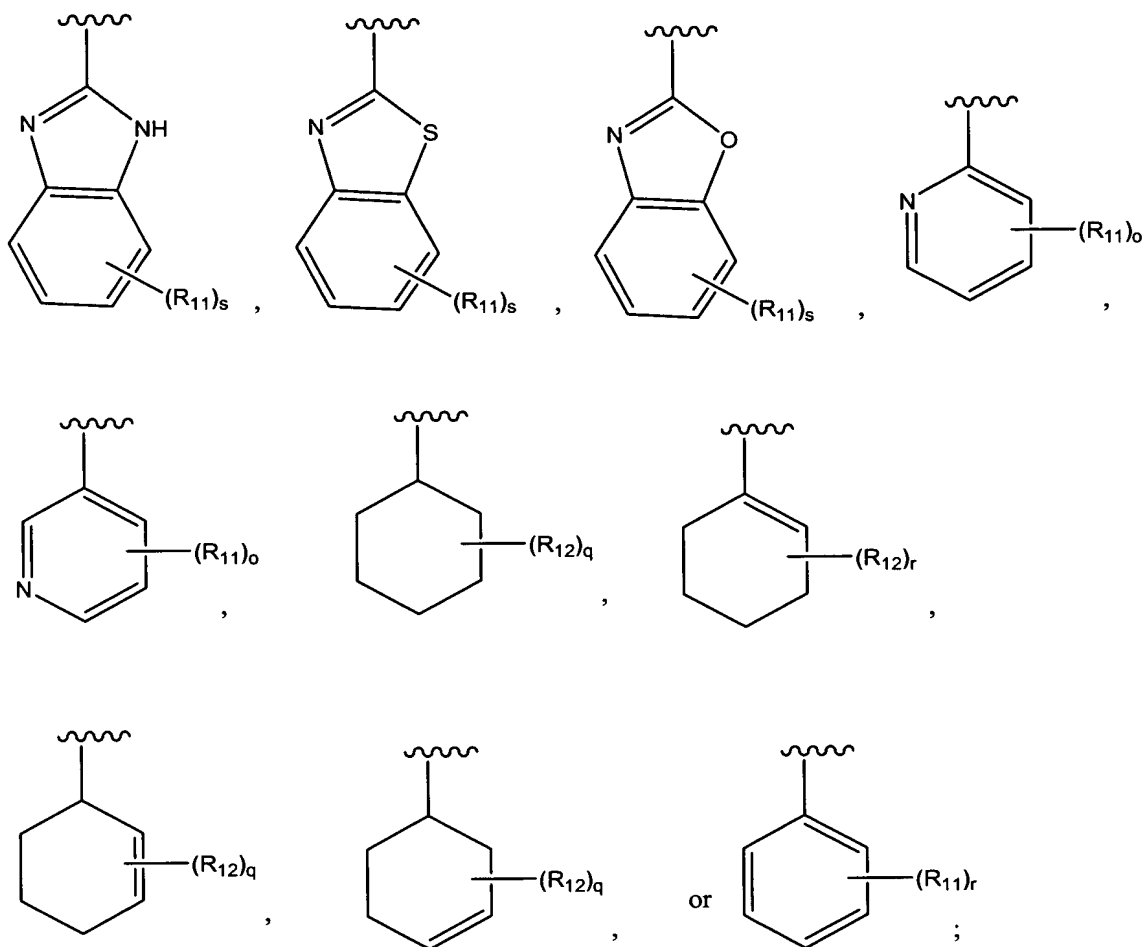
(VI)

or a pharmaceutically acceptable salt thereof, wherein:

10 Ar<sub>1</sub> is



Ar<sub>2</sub> is



$R_1$  is -H, -halo, -CH<sub>3</sub>, -NO<sub>2</sub>, -CN, -OH, -OCH<sub>3</sub>, -NH<sub>2</sub>, -C(halo)<sub>3</sub>, -CH(halo)<sub>2</sub>, or -CH<sub>2</sub>(halo);

each  $R_2$  is independently:

- 5 (a) -halo, -CN, -OH, NO<sub>2</sub>, -O(C<sub>1</sub>-C<sub>6</sub>)alkyl, or -NH<sub>2</sub>;  
 (b) -(C<sub>1</sub>-C<sub>10</sub>)alkyl, -(C<sub>2</sub>-C<sub>10</sub>)alkenyl, -(C<sub>2</sub>-C<sub>10</sub>)alkynyl, -(C<sub>3</sub>-C<sub>10</sub>)cycloalkyl, -(C<sub>8</sub>-C<sub>14</sub>)bicycloalkyl, -(C<sub>8</sub>-C<sub>14</sub>)tricycloalkyl, -(C<sub>5</sub>-C<sub>10</sub>)cycloalkenyl, -(C<sub>8</sub>-C<sub>14</sub>)bicycloalkenyl, -(C<sub>8</sub>-C<sub>14</sub>)tricycloalkenyl, -(3- to 7-membered)heterocycle, or -(7- to 10-membered)bicycloheterocycle, each of which is unsubstituted or substituted with one or  
 10 more  $R_7$  groups; or

(c) -phenyl, -naphthyl, -(C<sub>14</sub>)aryl, or -(5- to 10-membered)heteroaryl, each of which is unsubstituted or substituted with one or more  $R_8$  groups;

each  $R_3$  is independently:

- (a) -halo, -CN, -OH, NO<sub>2</sub>, -O(C<sub>1</sub>-C<sub>6</sub>)alkyl, or -NH<sub>2</sub>;  
 15 (b) -(C<sub>1</sub>-C<sub>10</sub>)alkyl, -(C<sub>2</sub>-C<sub>10</sub>)alkenyl, -(C<sub>2</sub>-C<sub>10</sub>)alkynyl, -(C<sub>3</sub>-C<sub>10</sub>)cycloalkyl, -(C<sub>8</sub>-C<sub>14</sub>)bicycloalkyl, -(C<sub>8</sub>-C<sub>14</sub>)tricycloalkyl, -(C<sub>5</sub>-C<sub>10</sub>)cycloalkenyl, -(C<sub>8</sub>-C<sub>14</sub>)bicycloalkenyl, -(C<sub>8</sub>-C<sub>14</sub>)tricycloalkenyl, -(3- to 7-membered)heterocycle, or -(7- to 10-

membered)bicycloheterocycle, each of which is unsubstituted or substituted with one or more R<sub>7</sub> groups; or

(c) -phenyl, -naphthyl, -(C<sub>14</sub>)aryl, or -(5- to 10-membered)heteroaryl, each of which is unsubstituted or substituted with one or more R<sub>8</sub> groups;

5 R<sub>4</sub> is -H, -(C<sub>1</sub>-C<sub>10</sub>)alkyl, -C(O)R<sub>9</sub>, or -C(O)NHR<sub>9</sub>;

R<sub>5</sub> is -H or -(C<sub>1</sub>-C<sub>10</sub>)alkyl;

each R<sub>7</sub> and R<sub>8</sub> is independently -(C<sub>1</sub>-C<sub>6</sub>)alkyl, -(C<sub>2</sub>-C<sub>6</sub>)alkenyl, -(C<sub>2</sub>-C<sub>6</sub>)alkynyl, -(C<sub>3</sub>-C<sub>8</sub>)cycloalkyl, -(C<sub>5</sub>-C<sub>8</sub>)cycloalkenyl, -phenyl, -(3- to 5-membered)heterocycle, -C(halo)<sub>3</sub>, -CH(halo)<sub>2</sub>, -CH<sub>2</sub>(halo), -CN, -OH, -halo, -N<sub>3</sub>, -NO<sub>2</sub>, -N(R<sub>10</sub>)<sub>2</sub>, -CH=NR<sub>10</sub>,  
10 -NR<sub>10</sub>OH, -OR<sub>10</sub>, -COR<sub>10</sub>, -C(O)OR<sub>10</sub>, -OC(O)R<sub>10</sub>, -OC(O)OR<sub>10</sub>, -SR<sub>10</sub>, -S(O)R<sub>10</sub>, or -S(O)<sub>2</sub>R<sub>10</sub>;

each R<sub>9</sub> is -H, -(C<sub>1</sub>-C<sub>6</sub>)alkyl, -(C<sub>2</sub>-C<sub>6</sub>)alkenyl, -(C<sub>2</sub>-C<sub>6</sub>)alkynyl, -(C<sub>3</sub>-C<sub>8</sub>)cycloalkyl, -(C<sub>5</sub>-C<sub>8</sub>)cycloalkenyl, -phenyl, -(3- to 5-membered)heterocycle, -C(halo)<sub>3</sub>, -CH(halo)<sub>2</sub>, -CH<sub>2</sub>(halo), -OH, -N(R<sub>10</sub>)<sub>2</sub>, -CH=NR<sub>10</sub>, -NR<sub>10</sub>OH, -OR<sub>10</sub>, or -SR<sub>10</sub>;

15 each R<sub>10</sub> is independently -H, -(C<sub>1</sub>-C<sub>6</sub>)alkyl, -(C<sub>2</sub>-C<sub>6</sub>)alkenyl, -(C<sub>2</sub>-C<sub>6</sub>)alkynyl, -(C<sub>3</sub>-C<sub>8</sub>)cycloalkyl, -(C<sub>5</sub>-C<sub>8</sub>)cycloalkenyl, -phenyl, -(3- to 5-membered)heterocycle, -C(halo)<sub>3</sub>, -CH(halo)<sub>2</sub>, or -CH<sub>2</sub>(halo);

each R<sub>11</sub> and R<sub>12</sub> is independently -(C<sub>1</sub>-C<sub>6</sub>)alkyl, -(C<sub>2</sub>-C<sub>6</sub>)alkenyl, -(C<sub>2</sub>-C<sub>6</sub>)alkynyl, -(C<sub>3</sub>-C<sub>8</sub>)cycloalkyl, -(C<sub>5</sub>-C<sub>8</sub>)cycloalkenyl, -phenyl, -C(halo)<sub>3</sub>, -CH(halo)<sub>2</sub>, -CH<sub>2</sub>(halo), -CN, -OH, -halo, -N<sub>3</sub>, -NO<sub>2</sub>, -N(R<sub>7</sub>)<sub>2</sub>, -CH=NR<sub>7</sub>, -NR<sub>7</sub>OH, -OR<sub>7</sub>, -COR<sub>7</sub>, -C(O)OR<sub>7</sub>, -OC(O)R<sub>7</sub>, -OC(O)OR<sub>7</sub>, -SR<sub>7</sub>, -S(O)R<sub>7</sub>, or -S(O)<sub>2</sub>R<sub>7</sub>;

each R<sub>13</sub> is independently -(C<sub>1</sub>-C<sub>6</sub>)alkyl, -(C<sub>2</sub>-C<sub>6</sub>)alkenyl, -(C<sub>2</sub>-C<sub>6</sub>)alkynyl, -(C<sub>3</sub>-C<sub>8</sub>)cycloalkyl, -(C<sub>5</sub>-C<sub>8</sub>)cycloalkenyl, -phenyl, -(3- to 5-membered)heterocycle, -C(halo)<sub>3</sub>, -CH(halo)<sub>2</sub>, CH<sub>2</sub>(halo), or -halo;

25 each halo is independently -F, -Cl, -Br, or -I;

s is an integer ranging from 0 to 4;

o is an integer ranging from 0 to 4;

q is an integer ranging from 0 to 6;

r is an integer ranging from 0 to 5;

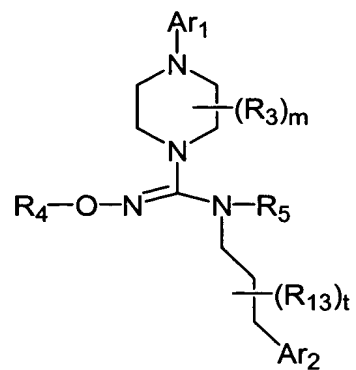
30 t is an integer ranging from 0 to 2;

p is an integer ranging from 0 to 2;

n is an integer ranging from 0 to 3; and

m is an integer ranging from 0 to 2.

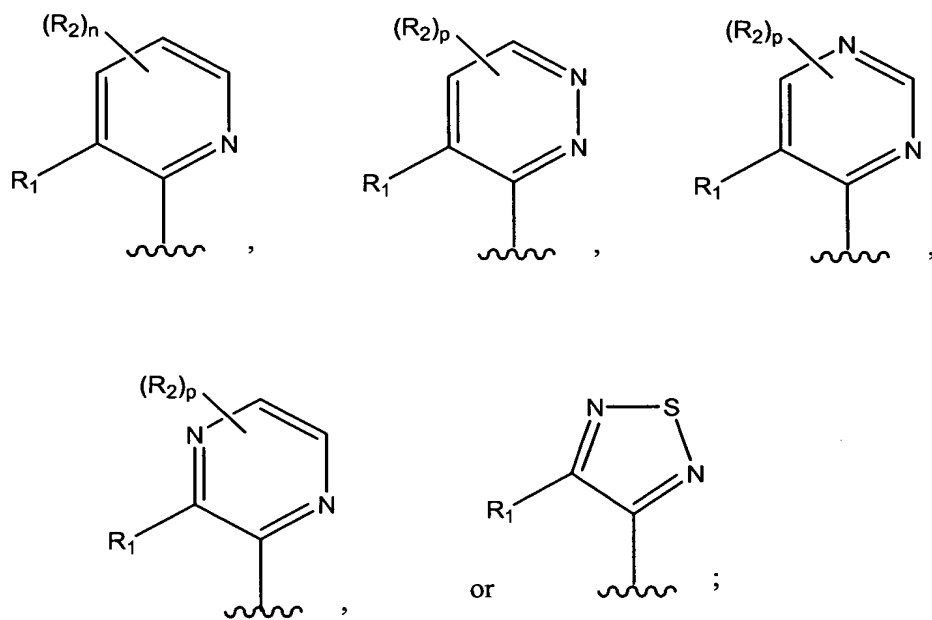
127. A compound of formula:



(VII)

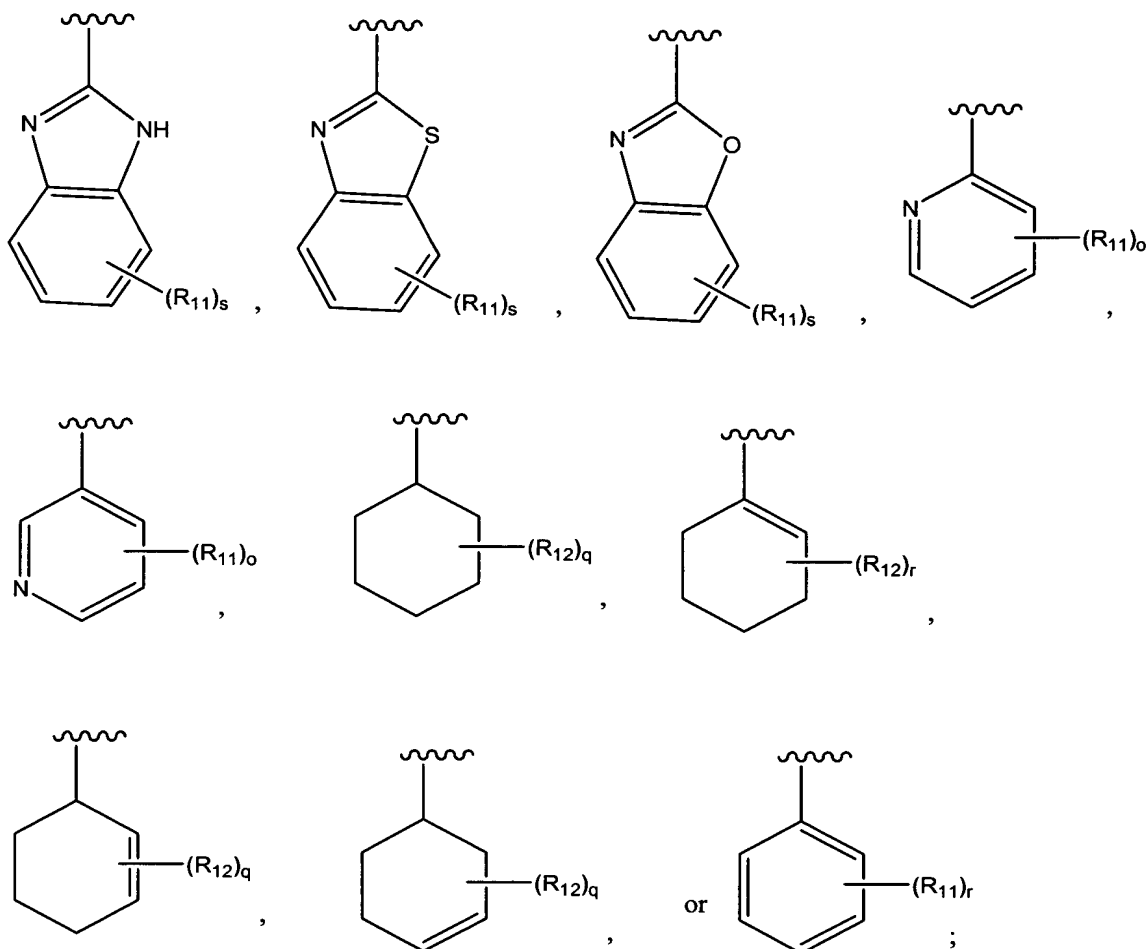
or a pharmaceutically acceptable salt thereof, wherein:

Ar<sub>1</sub> is



5

Ar<sub>2</sub> is



$R_1$  is -H, -halo, -CH<sub>3</sub>, -NO<sub>2</sub>, -CN, -OH, -OCH<sub>3</sub>, -NH<sub>2</sub>, -C(halo)<sub>3</sub>, -CH(halo)<sub>2</sub>, or -CH<sub>2</sub>(halo);

each  $R_2$  is independently:

5 (a) -halo, -CN, -OH, NO<sub>2</sub>, -O(C<sub>1</sub>-C<sub>6</sub>)alkyl, or -NH<sub>2</sub>;

(b) -(C<sub>1</sub>-C<sub>10</sub>)alkyl, -(C<sub>2</sub>-C<sub>10</sub>)alkenyl, -(C<sub>2</sub>-C<sub>10</sub>)alkynyl, -(C<sub>3</sub>-C<sub>10</sub>)cycloalkyl, -(C<sub>8</sub>-C<sub>14</sub>)bicycloalkyl, -(C<sub>8</sub>-C<sub>14</sub>)tricycloalkyl, -(C<sub>5</sub>-C<sub>10</sub>)cycloalkenyl, -(C<sub>8</sub>-C<sub>14</sub>)bicycloalkenyl, -(C<sub>8</sub>-C<sub>14</sub>)tricycloalkenyl, -(3- to 7-membered)heterocycle, or -(7- to 10-membered)bicycloheterocycle, each of which is unsubstituted or substituted with one or more  $R_7$  groups; or

(c) -phenyl, -naphthyl, -(C<sub>14</sub>)aryl, or -(5- to 10-membered)heteroaryl, each of which is unsubstituted or substituted with one or more  $R_8$  groups;

each  $R_3$  is independently:

(a) -halo, -CN, -OH, NO<sub>2</sub>, -O(C<sub>1</sub>-C<sub>6</sub>)alkyl, or -NH<sub>2</sub>;

15 (b) -(C<sub>1</sub>-C<sub>10</sub>)alkyl, -(C<sub>2</sub>-C<sub>10</sub>)alkenyl, -(C<sub>2</sub>-C<sub>10</sub>)alkynyl, -(C<sub>3</sub>-C<sub>10</sub>)cycloalkyl, -(C<sub>8</sub>-C<sub>14</sub>)bicycloalkyl, -(C<sub>8</sub>-C<sub>14</sub>)tricycloalkyl, -(C<sub>5</sub>-C<sub>10</sub>)cycloalkenyl, -(C<sub>8</sub>-C<sub>14</sub>)bicycloalkenyl, -(C<sub>8</sub>-C<sub>14</sub>)tricycloalkenyl, -(3- to 7-membered)heterocycle, or -(7- to 10-

membered)bicycloheterocycle, each of which is unsubstituted or substituted with one or more R<sub>7</sub> groups; or

(c) -phenyl, -naphthyl, -(C<sub>14</sub>)aryl, or -(5- to 10-membered)heteroaryl, each of which is unsubstituted or substituted with one or more R<sub>8</sub> groups;

5 R<sub>4</sub> is -H, -(C<sub>1</sub>-C<sub>10</sub>)alkyl, -C(O)R<sub>9</sub>, or -C(O)NHR<sub>9</sub>;

R<sub>5</sub> is -H or -(C<sub>1</sub>-C<sub>10</sub>)alkyl;

each R<sub>7</sub> and R<sub>8</sub> is independently -(C<sub>1</sub>-C<sub>6</sub>)alkyl, -(C<sub>2</sub>-C<sub>6</sub>)alkenyl, -(C<sub>2</sub>-C<sub>6</sub>)alkynyl, -(C<sub>3</sub>-C<sub>8</sub>)cycloalkyl, -(C<sub>5</sub>-C<sub>8</sub>)cycloalkenyl, -phenyl, -(3- to 5-membered)heterocycle, -C(halo)<sub>3</sub>, -CH(halo)<sub>2</sub>, -CH<sub>2</sub>(halo), -CN, -OH, -halo, -N<sub>3</sub>, -NO<sub>2</sub>, -N(R<sub>10</sub>)<sub>2</sub>, -CH=NR<sub>10</sub>,  
10 -NR<sub>10</sub>OH, -OR<sub>10</sub>, -COR<sub>10</sub>, -C(O)OR<sub>10</sub>, -OC(O)R<sub>10</sub>, -OC(O)OR<sub>10</sub>, -SR<sub>10</sub>, -S(O)R<sub>10</sub>, or -S(O)<sub>2</sub>R<sub>10</sub>;

each R<sub>9</sub> is -H, -(C<sub>1</sub>-C<sub>6</sub>)alkyl, -(C<sub>2</sub>-C<sub>6</sub>)alkenyl, -(C<sub>2</sub>-C<sub>6</sub>)alkynyl, -(C<sub>3</sub>-C<sub>8</sub>)cycloalkyl, -(C<sub>5</sub>-C<sub>8</sub>)cycloalkenyl, -phenyl, -(3- to 5-membered)heterocycle, -C(halo)<sub>3</sub>, -CH(halo)<sub>2</sub>, -CH<sub>2</sub>(halo), -OH, -N(R<sub>10</sub>)<sub>2</sub>, -CH=NR<sub>10</sub>, -NR<sub>10</sub>OH, -OR<sub>10</sub>, or -SR<sub>10</sub>;

15 each R<sub>10</sub> is independently -H, -(C<sub>1</sub>-C<sub>6</sub>)alkyl, -(C<sub>2</sub>-C<sub>6</sub>)alkenyl, -(C<sub>2</sub>-C<sub>6</sub>)alkynyl, -(C<sub>3</sub>-C<sub>8</sub>)cycloalkyl, -(C<sub>5</sub>-C<sub>8</sub>)cycloalkenyl, -phenyl, -(3- to 5-membered)heterocycle, -C(halo)<sub>3</sub>, -CH(halo)<sub>2</sub>, or -CH<sub>2</sub>(halo);

each R<sub>11</sub> and R<sub>12</sub> is independently -(C<sub>1</sub>-C<sub>6</sub>)alkyl, -(C<sub>2</sub>-C<sub>6</sub>)alkenyl, -(C<sub>2</sub>-C<sub>6</sub>)alkynyl, -(C<sub>3</sub>-C<sub>8</sub>)cycloalkyl, -(C<sub>5</sub>-C<sub>8</sub>)cycloalkenyl, -phenyl, -C(halo)<sub>3</sub>, -CH(halo)<sub>2</sub>, -CH<sub>2</sub>(halo), -CN, -OH, -halo, -N<sub>3</sub>, -NO<sub>2</sub>, -N(R<sub>7</sub>)<sub>2</sub>, -CH=NR<sub>7</sub>, -NR<sub>7</sub>OH, -OR<sub>7</sub>, -COR<sub>7</sub>, -C(O)OR<sub>7</sub>, -OC(O)R<sub>7</sub>, -OC(O)OR<sub>7</sub>, -SR<sub>7</sub>, -S(O)R<sub>7</sub>, or -S(O)<sub>2</sub>R<sub>7</sub>;

each R<sub>13</sub> is independently -(C<sub>1</sub>-C<sub>6</sub>)alkyl, -(C<sub>2</sub>-C<sub>6</sub>)alkenyl, -(C<sub>2</sub>-C<sub>6</sub>)alkynyl, -(C<sub>3</sub>-C<sub>8</sub>)cycloalkyl, -(C<sub>5</sub>-C<sub>8</sub>)cycloalkenyl, -phenyl, -(3- to 5-membered)heterocycle, -C(halo)<sub>3</sub>, -CH(halo)<sub>2</sub>, CH<sub>2</sub>(halo), or -halo;

25 each halo is independently -F, -Cl, -Br, or -I;

s is an integer ranging from 0 to 4;

o is an integer ranging from 0 to 4;

q is an integer ranging from 0 to 6;

r is an integer ranging from 0 to 5;

30 t is an integer ranging from 0 to 2;

p is an integer ranging from 0 to 2;

n is an integer ranging from 0 to 3; and

m is an integer ranging from 0 to 2.

128. A composition comprising an effective amount of the compound or a pharmaceutically acceptable salt of the compound of claim 126 and a pharmaceutically acceptable carrier or excipient.

5 129. A composition comprising an effective amount of the compound or a pharmaceutically acceptable salt of the compound of claim 127 and a pharmaceutically acceptable carrier or excipient.

130. A method for treating pain, comprising administering to an animal in need thereof an effective amount of the compound or a pharmaceutically acceptable salt of the compound of claim 126.

10 131. A method for treating pain, comprising administering to an animal in need thereof an effective amount of the compound or a pharmaceutically acceptable salt of the compound of claim 127.

15 132. A method for inhibiting VR1 function in a cell, comprising contacting a cell capable of expressing VR1 with an effective amount of the compound or a pharmaceutically acceptable salt of the compound of claim 126.

133. A method for inhibiting VR1 function in a cell, comprising contacting a cell capable of expressing VR1 with an effective amount of the compound or a pharmaceutically acceptable salt of the compound of claim 127.